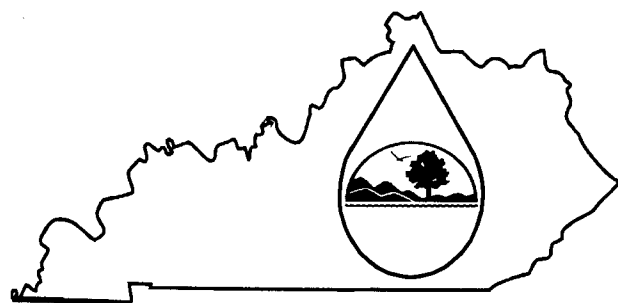


# ✓ *AK-1601* **KPDES FORM 1**



## **KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM**

RECEIVED BY KPDES BRANCH  
2005 OCT 31 P 2:58

### **PERMIT APPLICATION**

This is an application to: (check one)

- ☐ Apply for a new permit.  
☒ Apply for reissuance of expiring permit.  
☐ Apply for a construction permit.  
☐ Modify an existing permit.

Give reason for modification under Item II.A.

A complete application consists of this form and one of the following:

Form A, Form B, Form C, Form F, or Short Form C

For additional information contact:  
**KPDES Branch (502) 564-3410**

*CHK 420*

<b>I. FACILITY LOCATION AND CONTACT INFORMATION</b>		AGENCY USE	0	0	0	0	3	1	1
A. Name of business, municipality, company, etc. requesting permit North American Refractories Company									
B. Facility Name and Location					C. Facility Owner/Mailing Address				
Facility Location Name:					Owner Name:				
North American Refractories Company - South Shore Plant					North American Refractories Company				
Facility Location Address (i.e. street, road, etc.):					Mailing Street:				
US Highway 23					400 Fairway Drive				
Facility Location City, State, Zip Code:					Mailing City, State, Zip Code:				
South Shore, KY 41175-0457					Moon Township, PA 15108				
					Telephone Number: 412-375-6600				

### **II. FACILITY DESCRIPTION**

A. Provide a brief description of activities, products, etc: Production of refractory brick and shapes to be consumed by the steel and glass industries

#### **B. Standard Industrial Classification (SIC) Code and Description**

Principal SIC Code & Description:	3297 Non-Clay Refractories		
Other SIC Codes:	3255 Clay Refractories		

### **III. FACILITY LOCATION**

A. Attach a U.S. Geological Survey 7 ½ minute quadrangle map for the site. (See instructions)	
B. County where facility is located: Greenup	City where facility is located (if applicable): South Shore
C. Body of water receiving discharge: Tygarts Creek	
D. Facility Site Latitude (degrees, minutes, seconds): 038-43-30	Facility Site Longitude (degrees, minutes, seconds): 082-57-30
E. Method used to obtain latitude & longitude (see instructions): Topographical Map	
F. Facility Dun and Bradstreet Number (DUNS #) (if applicable): 09-390-2542	

<b>IV. OWNER/OPERATOR INFORMATION</b>	
A. Type of Ownership: <input type="checkbox"/> Publicly Owned <input checked="" type="checkbox"/> Privately Owned <input type="checkbox"/> State Owned <input type="checkbox"/> Both Public and Private Owned <input type="checkbox"/> Federally owned	
B. Operator Contact Information (See instructions)	
Name of Treatment Plant Operator: Matt Flaughner	Telephone Number: 606-932-3131
Operator Mailing Address (Street): US Highway 23	
Operator Mailing Address (City, State, Zip Code): South Shore, KY 41175-0457	
Is the operator also the owner? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the operator certified? If yes, list certification class and number below. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Certification Class: 1	Certification Number:

<b>V. EXISTING ENVIRONMENTAL PERMITS</b>		
Current NPDES Number: KY0000311	Issue Date of Current Permit: 5/1/2001	Expiration Date of Current Permit: 4/30/2006
Number of Times Permit Reissued: 12	Date of Original Permit Issuance: 7/1/1971	Sludge Disposal Permit Number: N/A
Kentucky DOW Operational Permit #: N/A	Kentucky DSMRE Permit Number(s): N/A	

C. Which of the following additional environmental permit/registration categories will also apply to this facility?

CATEGORY	EXISTING PERMIT WITH NO.	PERMIT NEEDED WITH PLANNED APPLICATION DATE
Air Emission Source	0-84-226, S-98-071	N/A
Solid or Special Waste	N/A	
Hazardous Waste - Registration or Permit	KYD084202736	N/A

<b>VI. DISCHARGE MONITORING REPORTS (DMRs)</b>
--

KPDES permit holders are required to submit DMRs to the Division of Water on a regular schedule (as defined by the KPDES permit). The information in this section serves to specifically identify the department, office or individual you designate as responsible for submitting DMR forms to the Division of Water.

A. Name of department, office or official submitting DMRs:	Harry D. McElrath, Plant Manager
B. Address where DMR forms are to be sent. (Complete only if address is different from mailing address in Section I.)	
DMR Mailing Name:	
DMR Mailing Street:	
DMR Mailing City, State, Zip Code:	
DMR Official Telephone Number:	


## VII. APPLICATION FILING FEE

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount. Descriptions of the base fee amounts are given in the "General Instructions."

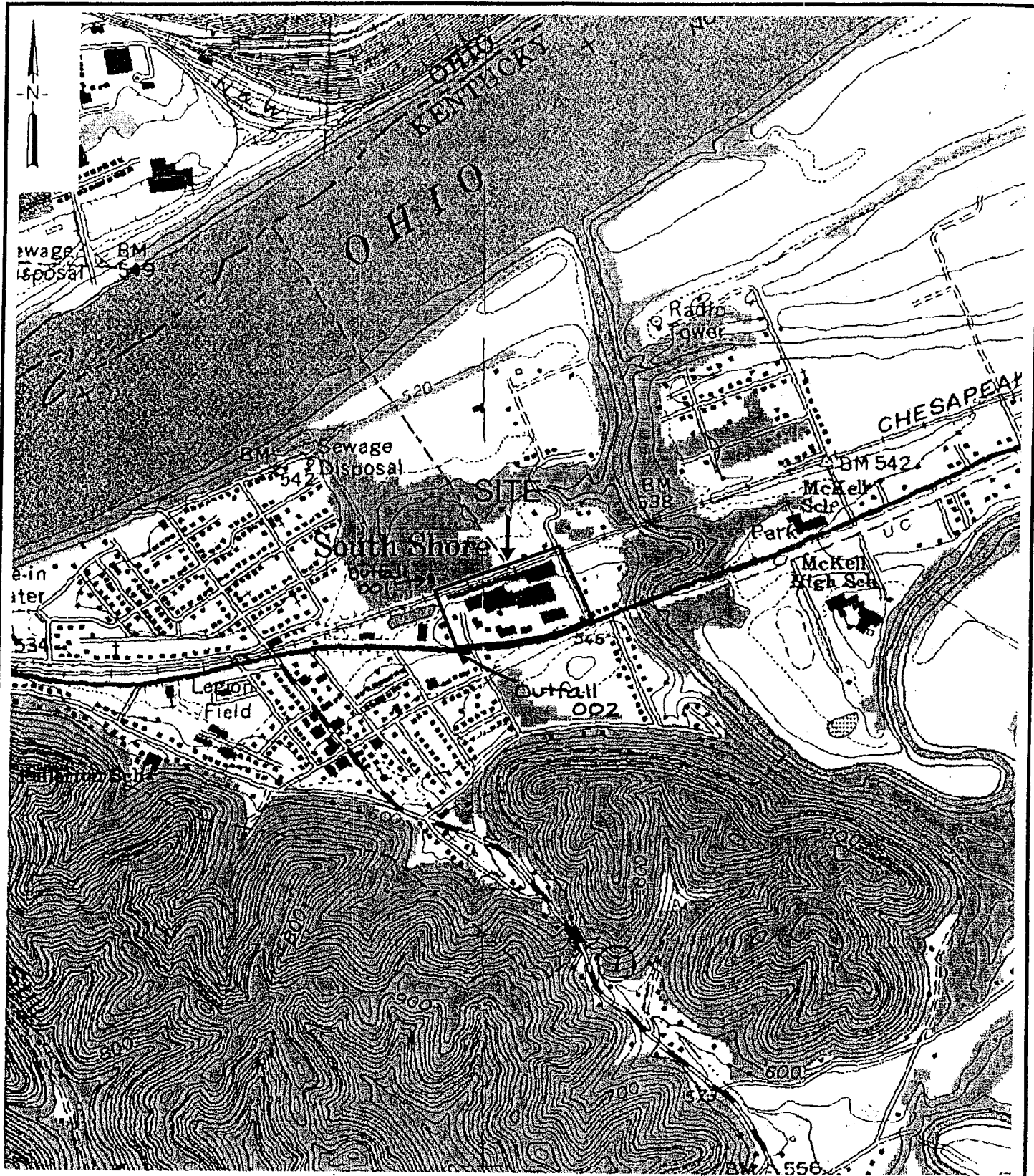
Facility Fee Category:	Filing Fee Enclosed:
Minor Industry ✓	\$420.00

## VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Michael A. Schalk, Corporate Secretary	412-375-6701
SIGNATURE	DATE:
	Oct 28, 2001

NORTH AMERICAN REFRACTORIES CO. - 43245-001-5020-121 - SOUTH SHORE, KENTUCKY



0 2000 4000  
SCALE IN FEET

BASE MAP SOURCE: USGS 7 1/2 minute  
topographic quadrangle map Portsmouth,  
Ohio-Kentucky 1981, revised 1993.



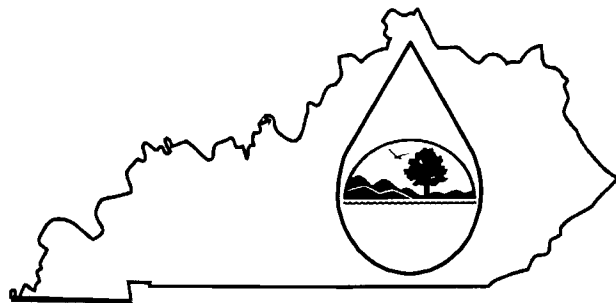
NORTH AMERICAN REFRACTORIES CO.

FIGURE 1  
SITE VICINITY MAP

JOB NO. 43245-001-121

Dames & Moore

# KPDES FORM C



## KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

KPDES BRANCH  
2005 OCT 31 P 2:58

### PERMIT APPLICATION

A complete application consists of this form and Form 1.  
For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: North American Refractories Company	County: Greenup					
<b>I. OUTFALL LOCATION</b>	AGENCY USE					

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
001	038	43	30	082	57	30	Tygarts Creek
002	038	43	26	082	57	27	Tygarts Creek

## II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
001	Monolithics operations, slip cast operations, casting operations (process water, mixer washouts, floor washing, etc.)	approx. 1,250 gpd avg. flow	Cascading settling container, sedimentation pit, flocculation, neutralization, plate & frame filter press, aerobic digestion, clarifier	1-U, 1-U, 1-G, 2-K, 5R, 5A, 1U
001	Finish grinding operations (process water, machine wash downs) Design flow aerobic waste treatment unit	approx. 2,250 gpd avg. flow (5000 gpd)	sedimentation pit, flocculation, neutralization, plate & frame filter press, aerobic digestion, clarifier	1-U, 1-G, 2-K, 5R, 5A, 1U
001	Storm water runoff	intermittent	none	4-A
002	Storm water runoff	intermittent	none	4-A

**II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)**

C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐ Yes (Complete the following table.)

☒ No (Go to Section III.)

OUTFALL NUMBER	OPERATIONS CONTRIBUTING FLOW	FREQUENCY		FLOW				
		Days Per Week	Months Per Year	Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)
				Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	
(list)	(list)	(specify average)	(specify average)					

**III. MAXIMUM PRODUCTION**

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ Yes (Complete Item III-B) List effluent guideline category:

☒ No (Go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?

☐ Yes (Complete Item III-C)

☐ No (Go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

MAXIMUM QUANTITY			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	

**IV. IMPROVEMENTS**

A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.

☐ Yes (Complete the following table)

☒ No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

**V. INTAKE AND EFFLUENT CHARACTERISTICS**

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE
Chromium	Raw materials used in the manufacture of some refractories/shapes	Ethylene glycol	Raw material used as an antifreeze in the manufacture of some refractories

**VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS**

A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?

☐

Yes (List all such pollutants below)

☒

No (Go to Item VI-B)

B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐

Yes (Complete Item VI-C)

☒

No (Go to Item VII)

C. If you answered "Yes" to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue on additional sheets if you need more space.

**VII. BIOLOGICAL TOXICITY TESTING DATA**

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (Identify the test(s) and describe their purposes below)

☒ No (Go to Section VIII)

**VIII. CONTRACT ANALYSIS INFORMATION**

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

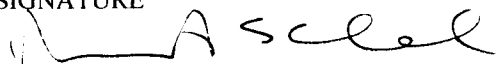
☒ Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below)

☐ No (Go to Section IX)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)
Appalachian Regional Consultants, Inc.	1222 State Route 716 Ashland, KY 41102	606-928-5177	pH, Temperature, BOD, TSS, COD, Color, TOC, Hardness, Oil & Grease, Ammonia, Total Aluminum, Total Barium, Total Magnesium, Total Titanium, Total Chromium, Total Zinc

**IX. CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Michael A. Schalk, Corporate Secretary	412-375-6701
SIGNATURE 	DATE Oct 20, 2005





PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C)											OUTFALL NO. 001	
Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.												
1. POLLUTANT	2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No of Analyses
	(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
	Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
a. Biochemical Oxygen Demand (BOD)	74.00	43.71	38.75	14.56	17.10	3.39	48	mg/l	lbs./day			
b. Chemical Oxygen Demand (COD)	224.00	49.60	78.35	16.06	52.47	7.67	48	mg/l	lbs./day			
c. Total Organic Carbon (TOC)	73.40	9.37	24.60	3.30	7.98	1.05	48	mg/l	lbs./day			
d. Total Suspended Solids (TSS)	51.50	12.19	25.50	3.75	9.91	1.58	48	mg/l	lbs./day			
e. Ammonia (as N)												
f. Flow (in units of MGD)	VALUE 0.144		VALUE 0.048		VALUE 0.022		48	MGD		VALUE		
g. Temperature (winter)	VALUE 17.0		VALUE 15.0		VALUE 11.3		24	°c		VALUE		
h. Temperature (summer)	VALUE 25.0		VALUE 23.8		VALUE 20.2		24	°c		VALUE		
i. pH	MINIMUM 6.54	MAXIMUM 8.43	MINIMUM 7.31	MAXIMUM 8.12			48	STANDARD UNITS				

Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO.  (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		6. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentrati on	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
a. Bromide (24959-67-9)		X													
b. Bromine Total Residual		X													
c. Chloride		X													
d. Chlorine, Total Residual		X													
e. Color	X		2.00		1.50		1.08		48	ADMI					
f. Fecal Coliform		X													
g. Fluoride (16984-48-8)		X													
h. Hardness (as CaCO <sub>3</sub> )	X		360.00	294.24	277.50	100.66	209.77	36.95	48	mg/l	lbs./day				
i. Nitrate – Nitrite (as N)		X													
j. Nitrogen, Total Organic (as N)		X													
k. Oil and Grease	X		12.07	14.50	9.45	4.30	2.66	0.74	48	mg/l	lbs./day				
l. Phosphorous (as P), Total 7723-14-0		X													
m. Radioactivity															
(1) Alpha, Total		X													
(2) Beta, Total		X													
(3) Radium Total		X													
(4) Radium, 226, Total		X													

Part B - Continued														
1. POLLUTANT And CAS NO.  (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
			(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
			Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
n. Sulfate (as SO <sub>4</sub> ) (14808-79-8)		X												
o. Sulfide (as S)		X												
p. Sulfite (as SO <sub>3</sub> ) (14286-46-3)		X												
q. Surfactants		X												
r. Aluminum, Total (7429-90)	X													
s. Barium, Total (7440-39-3)	X													
t. Boron, Total (7440-42-8)		X												
u. Cobalt, Total (7440-48-4)		X												
v. Iron, Total (7439-89-6)		X												
w. Magnesium Total (7439-96-4)	X													
x. Molybdenum Total (7439-98-7)		X												
y. Manganese, Total (7439-96-6)		X												
z. Tin, Total (7440-31-5)		X												
aa. Titanium, Total (7440-32-6)	X													

**Part C** – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark “X” in the **Testing Required** column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark “X” in the **Believed Present** column for each pollutant you know or have reason to believe is present. Mark “X” in the **Believed Absent** column for each pollutant you believe to be absent. If you mark either the **Testing Required** or **Believed Present** columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT And CAS NO.  (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses		
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)			
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass			
METALS, CYANIDE AND TOTAL PHENOLS																	
1M. Antimony Total (7440-36-0)			X														
2M. Arsenic, Total (7440-38-2)			X														
3M. Beryllium Total (7440-41-7)			X														
4M. Cadmium Total (7440-43-9)			X														
5M. Chromium Total (7440-43-9)		X															
6M. Copper Total (7550-50-8)			X														
7M. Lead Total (7439-92-1)			X														
8M. Mercury Total (7439-97-6)			X														
9M. Nickel, Total (7440-02-0)			X														
10M. Selenium, Total (7782-49-2)			X														
11M. Silver, Total (7440-28-0)			X														

Part C – Continued																
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
<b>METALS, CYANIDE AND TOTAL PHENOLS (Continued)</b>																
12M. Thallium, Total (7440-28-0)			X													
13M. Zinc, Total (7440-66-6)		X														
14M. Cyanide, Total (57-12-5)			X													
15M. Phenols, Total			X													
<b>DIOXIN</b>																
2,3,7,8 Tetra- chlorodibenzo, P, Dioxin (1784-01-6)			X	DESCRIBE RESULTS:												
<b>GC/MS FRACTION – VOLATILE COMPOUNDS</b>																
1V. Acrolein (107-02-8)			X													
2V. Acrylonitrile (107-13-1)			X													
3V. Benzene (71-43-2)			X													
5V. Bromoform (75-25-2)			X													
6V. Carbon Tetrachloride (56-23-5)			X													
7V. Chloro- benzene (108-90-7)			X													
8V. Chlorodibro- momethane (124-48-1)			X													

Part C – Continued

1. POLLUTANT And CAS NO.  (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
9V. Chloroethane (74-00-3)			X												
10V. 2-Chloro- ethylvinyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)			X												
12V. Dichloro- bromomethane (75-71-8)			X												
14V. 1,1- Dichloroethane (75-34-3)			X												
15V. 1,2- Dichloroethane (107-06-2)			X												
16V. 1,1- Dichlorethylene (75-35-4)			X												
17V. 1,2-Di- chloropropane (78-87-5)			X												
18V. 1,3- Dichloropro- pylene (452-75-6)			X												
19V. Ethyl- benzene (100-41-4)			X												
20V. Methyl Bromide (74-83-9)			X												

Part C – Continued															
1. POLLUTANT And CAS NO.  (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
21V. Methyl Chloride (74-87-3)			X												
22V. Methylene Chloride (75-00-2)			X												
23V. 1,1,2,2- Tetrachloro- ethane (79-34-5)			X												
24V.        Tetrachloro- ethylene (127-18-4)			X												
25V. Toluene (108-88-3)			X												
26V. 1,2-Trans- Dichloro- ethylene (156-60-5)			X												
27V. 1,1,1-Trichloroethane (71-55-6)			X												
28V. 1,1,2-Trichloroethane (79-00-5)			X												
29V. Trichloro- ethylene (79-01-6)			X												
30V. Vinyl Chloride (75-01-4)			X												



Part C – Continued																
1. POLLUTANT And CAS NO.  (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
GC/MS FRACTION – ACID COMPOUNDS																
1A. 2-Chloro-phenol (95-57-8)			X													
2A. 2,4-Dichlor-Orophenol (120-83-2)			X													
3A. 2,4-Dimeth-ylphenol (105-67-9)			X													
4A. 4,6-Dinitro-o-cresol (534-52-1)			X													
5A. 2,4-Dinitro-phenol (51-28-5)			X													
6A. 2-Nitro-phenol (88-75-5)			X													
7A. 4-Nitro-phenol (100-02-7)			X													
8A. P-chloro-m-cresol (59-50-7)			X													
9A. Pentachloro-phenol (87-88-5)			X													
10A. Phenol (108-05-2)			X													
11A. 2,4,6-Tri-chlororphenol (88-06-2)			X													
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS																
1B. Acena-phthene (83-32-9)			X													

Part C – Continued																
1. POLLUTANT And CAS NO.  (if available)	2. MARK “X”			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																
2B. Acena- phtylene (208-96-8)			X													
3B. Anthra- cene (120-12-7)			X													
4B. Benzidine (92-87-5)			X													
5B. Benzo(a)- anthracene (56-55-3)			X													
6B. Benzo(a)- pyrene (50-32-8)			X													
7B. 3,4-Benzo- fluoranthene (205-99-2)			X													
8B. Benzo(ghi) perylene (191-24-2)			X													
9B. Benzo(k)- fluoranthene (207-08-9)			X													
10B. Bis(2- chlor- oethoxy)- methane (111-91-1)			X													
11B. Bis (2-chlor- oisopropyl)- Ether			X													
12B. Bis (2-ethyl- hexyl)- phthalate (117-81-7)			X													

Part C – Continued															
1. POLLUTANT And CAS NO.  (if available)	2. MARK “X”			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
13B. 4-Bromo-phenyl Phenyl ether (101-55-3)			X												
14B. Butyl-benzyl phthalate (85-68-7)			X												
15B. 2-Chloro-naphthalene (7005-72-3)			X												
16B. 4-Chloro-phenyl phenyl ether (7005-72-3)			X												
17B. Chrysene (218-01-9)			X												
18B. Dibenzo-(a,h) Anthracene (53-70-3)			X												
19B. 1,2-Dichloro-benzene (95-50-1)			X												
20B. 1,3-Dichloro-Benzene (541-73-1)			X												
21B. 1,4-Dichloro-benzene (106-46-7)			X												
22B. 3,3-Dichloro-benzidene (91-94-1)			X												
23B. Diethyl Phthalate (84-66-2)			X												

Part C – Continued																
1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																
24B. Dimethyl Phthalate (131-11-3)			X													
25B. Di-N- butyl Phthalate (84-74-2)			X													
26B. 2,4-Dinitro- toluene (121-14-2)			X													
27B. 2,6-Dinitro- toluene (606-20-2)			X													
28B. Di-n-octyl Phthalate (117-84-0)			X													
29B. 1,2- diphenyl- hydrazine (as azonbenzene) (122-66-7)			X													
30B. Fluoranthene (208-44-0)			X													
31B. Fluorene (86-73-7)			X													
32B. Hexachloro- benzene (118-71-1)			X													
33B. Hexachloro- butadiene (87-68-3)			X													
34B. Hexachloro- cyclopenta- diene (77-47-4)			X													

Part C – Continued																
1. POLLUTANT And CAS NO.  (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																
35B. Hexachloroethane (67-72-1)			X													
36B. Indneo-(1,2,3-oc)-Pyrene (193-39-5)			X													
37B. Isophorone (78-59-1)			X													
38B. Napthalene (91-20-3)			X													
39B. Nitrobenzene (98-95-3)			X													
40B. N-Nitroso-dimethyl-amine (62-75-9)			X													
41B. N-nitrosodi-n-propylamine (621-64-7)			X													
42B. N-nitrosodiphenyl-amine (86-30-6)			X													
43B. Phenanthrene (85-01-8)			X													
44B. Pyrene (129-00-0)			X													
45B. 1,2,4 Trichlorobenzene (120-82-1)			X													

Part C – Continued																
1. POLLUTANT And CAS NO.  (if available)	2. MARK “X”			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
GC/MS FRACTION – PESTICIDES																
1P. Aldrin (309-00-2)			X													
2P. α-BHC (319-84-6)			X													
3P. β-BHC (58-89-9)			X													
4P. gamma-BHC (58-89-9)			X													
5P. δ-BHC (319-86-8)			X													
6P. Chlordane (57-74-9)			X													
7P. 4,4’-DDT (50-29-3)			X													
8P. 4,4’-DDE (72-55-9)			X													
9P. 4,4’-DDD (72-54-8)			X													
10P. Dieldrin (60-57-1)			X													
11P. α- Endosulfan (115-29-7)			X													
12P. β- Endosulfan (115-29-7)			X													
13P. Endosulfan Sulfate (1031-07-8)			X													
14P. Endrin (72-20-8)			X													

Part C – Continued															
1. POLLUTANT And CAS NO.  (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a.		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a.		b. No. of Analyses
				Maximum Daily Value		Concentration		Mass					Long-Term Avg Value		
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – PESTICIDES															
15P. Endrin Aldehyde (7421-93-4)			X												
16P. Heptachlor (76-44-8)			X												
17P. Heptaclor Epoxide (1024-57-3)			X												
18P. PCB-1242 (53469-21-9)			X												
19P. PCB-1254 (11097-69-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-16-5)			X												
22P. PCB-1248 (12672-29-6)			X												
23P. PCB-1260 (11096-82-5)			X												
24P. PCB-1016 (12674-11-2)			X												
25P. Toxaphene (8001-35-2)			X												

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C)										OUTFALL NO. <b>002</b>		
Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.												
1. POLLUTANT	2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No of Analyses
	(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
	Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)	33.00	18.55	33.00	18.55	11.04	2.95	12	mg/l	lbs./day			
e. Ammonia (as N)												
f. Flow (in units of MGD)	VALUE 0.144		VALUE 0.144		VALUE 0.027		12	MGD		VALUE		
g. Temperature (winter)	VALUE		VALUE		VALUE			°c		VALUE		
h. Temperature (summer)	VALUE		VALUE		VALUE			°c		VALUE		
i. pH	MINIMUM 6.03	MAXIMUM 8.31	MINIMUM 6.03	MAXIMUM 8.31			12	STANDARD UNITS				



Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO.  (if available)	2. MARK "X"		3. EFFLUENT								4. UNITS		6. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentra- tion	b. Mass	a. Long-Term Avg Value		b. No. of Analyses		
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass			
a. Bromide (24959-67-9)		X														
b. Bromine Total Residual		X														
c. Chloride		X														
d. Chlorine, Total Residual		X														
e. Color	X															
f. Fecal Coliform		X														
g. Fluoride (16984-48-8)		X														
h. Hardness (as CaCO <sub>3</sub> )	X															
i. Nitrate – Nitrite (as N)		X														
j. Nitrogen, Total Organic (as N)		X														
k. Oil and Grease	X		6.40	4.32	6.40	4.32	3.52	0.84	12	mg/l	lbs./day					
l. Phosphorous (as P), Total 7723-14-0		X														
m. Radioactivity																
(1) Alpha, Total		X														
(2) Beta, Total		X														
(3) Radium Total		X														
(4) Radium, 226, Total		X														

Part B - Continued

1. POLLUTANT AND CAS NO.  (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
n. Sulfate (as SO <sub>4</sub> ) (14808-79-8)		X												
o. Sulfide (as S)		X												
p. Sulfite (as SO <sub>4</sub> ) (14286-46-3)		X												
q. Surfactants		X												
r. Aluminum, Total (7429-90)	X													
s. Barium, Total (7440-39-3)	X													
t. Boron, Total (7440-42-8)		X												
u. Cobalt, Total (7440-48-4)		X												
v. Iron, Total (7439-89-6)		X												
w. Magnesium Total (7439-96-4)	X													
x. Molybdenum Total (7439-98-7)		X												
y. Manganese, Total (7439-96-6)		X												
z. Tin, Total (7440-31-5)		X												
aa. Titanium, Total (7440-32-6)	X													

**Part C** – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark “X” in the **Testing Required** column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark “X” in the **Believed Present** column for each pollutant you know or have reason to believe is present. Mark “X” in the **Believed Absent** column for each pollutant you believe to be absent. If you mark either the **Testing Required** or **Believed Present** columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT And CAS NO.  (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
METALS, CYANIDE AND TOTAL PHENOLS																
1M. Antimony Total (7440-36-0)			X													
2M. Arsenic, Total (7440-38-2)			X													
3M. Beryllium Total (7440-41-7)			X													
4M. Cadmium Total (7440-43-9)			X													
5M. Chromium Total (7440-43-9)		X														
6M. Copper Total (7550-50-8)			X													
7M. Lead Total (7439-92-1)			X													
8M. Mercury Total (7439-97-6)			X													
9M. Nickel, Total (7440-02-0)			X													
10M. Selenium, Total (7782-49-2)			X													
11M. Silver, Total (7440-28-0)			X													

Part C – Continued																
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
<b>METALS, CYANIDE AND TOTAL PHENOLS (Continued)</b>																
12M. Thallium, Total (7440-28-0)			X													
13M. Zinc, Total (7440-66-6)		X														
14M. Cyanide, Total (57-12-5)			X													
15M. Phenols, Total			X													
<b>DIOXIN</b>																
2,3,7,8 Tetra- chlorodibenzo, P, Dioxin (1784-01-6)			X	DESCRIBE RESULTS:												
<b>GC/MS FRACTION – VOLATILE COMPOUNDS</b>																
1V. Acrolein (107-02-8)			X													
2V. Acrylonitrile (107-13-1)			X													
3V. Benzene (71-43-2)			X													
5V. Bromoform (75-25-2)			X													
6V. Carbon Tetrachloride (56-23-5)			X													
7V. Chloro- benzene (108-90-7)			X													
8V. Chlorodibromomethane (124-48-1)			X													

Part C – Continued															
1. POLLUTANT And CAS NO.  (if available)	2. MARK “X”			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a.		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a.		b. No. of Analyses
				Maximum Daily Value									Long-Term Avg Value		
				(1) Concentration	(2) Mass	(1)	(2)	(1)	(2)				(1) Concentration	(2) Mass	
9V. Chloroethane (74-00-3)			X												
10V. 2-Chloro- ethylvinyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)			X												
12V. Dichloro- bromomethane (75-71-8)			X												
14V. 1,1- Dichloroethane (75-34-3)			X												
15V. 1,2- Dichloroethane (107-06-2)			X												
16V. 1,1- Dichlorethylene (75-35-4)			X												
17V. 1,2-Di- chloropropane (78-87-5)			X												
18V. 1,3- Dichloropro- pylene (452-75-6)			X												
19V. Ethyl- benzene (100-41-4)			X												
20V. Methyl Bromide (74-83-9)			X												

Part C – Continued															
1. POLLUTANT And CAS NO.  (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
21V. Methyl Chloride (74-87-3)			X												
22V. Methylene Chloride (75-00-2)			X												
23V. 1,1,2,2- Tetrachloro- ethane (79-34-5)			X												
24V. Tetrachloro- ethylene (127-18-4)			X												
25V. Toluene (108-88-3)			X												
26V. 1,2-Trans- Dichloro- ethylene (156-60-5)			X												
27V. 1,1,1,1-Tri- chloroethane (71-55-6)			X												
28V. 1,1,2-Tri- chloroethane (79-00-5)			X												
29V. Trichloro- ethylene (79-01-6)			X												
30V. Vinyl Chloride (75-01-4)			X												

Part C – Continued																
1. POLLUTANT And CAS NO.  (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
GC/MS FRACTION – ACID COMPOUNDS																
1A. 2-Chloro-phenol (95-57-8)			X													
2A. 2,4-Dichlor-Orophenol (120-83-2)			X													
3A. 2,4-Dimeth-ylphenol (105-67-9)			X													
4A. 4,6-Dinitro-o-cresol (534-52-1)			X													
5A. 2,4-Dinitro-phenol (51-28-5)			X													
6A. 2-Nitro-phenol (88-75-5)			X													
7A. 4-Nitro-phenol (100-02-7)			X													
8A. P-chloro-m-cresol (59-50-7)			X													
9A. Pentachloro-phenol (87-88-5)			X													
10A. Phenol (108-05-2)			X													
11A. 2,4,6-Tri-chlorophenol (88-06-2)			X													
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS																
1B. Acena-phthene (83-32-9)			X													

Part C – Continued																
1. POLLUTANT And CAS NO.  (if available)	2. MARK “X”			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																
2B. Acena- phylyene (208-96-8)			X													
3B. Anthra- cene (120-12-7)			X													
4B. Benzidine (92-87-5)			X													
5B. Benzo(a)- anthracene (56-55-3)			X													
6B. Benzo(a)- pyrene (50-32-8)			X													
7B. 3,4-Benzo- fluoranthene (205-99-2)			X													
8B. Benzo(ghi) perylene (191-24-2)			X													
9B. Benzo(k)- fluoranthene (207-08-9)			X													
10B. Bis(2- chlor- oethoxy)- methane (111-91-1)			X													
11B. Bis (2-chlor- oisopropyl)- Ether			X													
12B. Bis (2-ethyl- hexyl)- phthalate (117-81-7)			X													



Part C – Continued																
1. POLLUTANT And CAS NO.  (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																
13B. 4-Bromo-phenyl Phenyl ether (101-55-3)			X													
14B. Butyl-benzyl phthalate (85-68-7)			X													
15B. 2-Chloro-naphthalene (7005-72-3)			X													
16B. 4-Chloro-phenyl phenyl ether (7005-72-3)			X													
17B. Chrysene (218-01-9)			X													
18B. Dibenzo-(a,h) Anthracene (53-70-3)			X													
19B. 1,2-Dichloro-benzene (95-50-1)			X													
20B. 1,3-Dichloro-Benzene (541-73-1)			X													
21B. 1,4-Dichloro-benzene (106-46-7)			X													
22B. 3,3-Dichloro-benzidene (91-94-1)			X													
23B. Diethyl Phthalate (84-66-2)			X													

Part C – Continued															
1. POLLUTANT And CAS NO.  (if available)	2. MARK “X”			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
24B. Dimethyl Phthalate (131-11-3)			X												
25B. Di-N- butyl Phthalate (84-74-2)			X												
26B. 2,4-Dinitro- toluene (121-14-2)			X												
27B. 2,6-Dinitro- toluene (606-20-2)			X												
28B. Di-n-octyl Phthalate (117-84-0)			X												
29B. 1,2- diphenyl- hydrazine (as azonbenzene) (122-66-7)			X												
30B. Fluoranthene (208-44-0)			X												
31B. Fluorene (86-73-7)			X												
32B. Hexachloro- benzene (118-71-1)			X												
33B. Hexachloro- butadiene (87-68-3)			X												
34B. Hexachloro- cyclopenta- diene (77-47-4)			X												

Part C – Continued																
1. POLLUTANT And CAS NO.  (if available)	2. MARK “X”			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																
35B. Hexachloroethane (67-72-1)			X													
36B. Indneo-(1,2,3-oc)-Pyrene (193-39-5)			X													
37B. Isophorone (78-59-1)			X													
38B. Napthalene (91-20-3)			X													
39B. Nitrobenzene (98-95-3)			X													
40B. N-Nitroso-dimethylamine (62-75-9)			X													
41B. N-nitrosodi-n-propylamine (621-64-7)			X													
42B. N-nitrosodiphenylamine (86-30-6)			X													
43B. Phenanthrene (85-01-8)			X													
44B. Pyrene (129-00-0)			X													
45B. 1,2,4 Trichlorobenzene (120-82-1)			X													

Part C – Continued																
1. POLLUTANT And CAS NO.  (if available)	2. MARK “X”			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
GC/MS FRACTION – PESTICIDES																
1P. Aldrin (309-00-2)			X													
2P. α-BHC (319-84-6)			X													
3P. β-BHC (58-89-9)			X													
4P. gamma-BHC (58-89-9)			X													
5P. δ-BHC (319-86-8)			X													
6P. Chlordane (57-74-9)			X													
7P. 4,4’-DDT (50-29-3)			X													
8P. 4,4’-DDE (72-55-9)			X													
9P. 4,4’-DDD (72-54-8)			X													
10P. Dieldrin (60-57-1)			X													
11P. α- Endosulfan (115-29-7)			X													
12P. β- Endosulfan (115-29-7)			X													
13P. Endosulfan Sulfate (1031-07-8)			X													
14P. Endrin (72-20-8)			X													

Part C – Continued															
1. POLLUTANT And CAS NO.  (if available)	2. MARK “X”			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
GC/MS FRACTION – PESTICIDES															
15P. Endrin Aldehyde (7421-93-4)			X												
16P. Heptachlor (76-44-8)			X												
17P. Heptachlor Epoxide (1024-57-3)			X												
18P. PCB-1242 (53469-21-9)			X												
19P. PCB-1254 (11097-69-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-16-5)			X												
22P. PCB-1248 (12672-29-6)			X												
23P. PCB-1260 (11096-82-5)			X												
24P. PCB-1016 (12674-11-2)			X												
25P. Toxaphene (8001-35-2)			X												

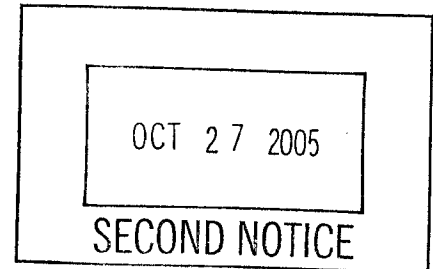


ERNIE FLETCHER  
GOVERNOR

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
DIVISION OF WATER  
14 REILLY ROAD  
FRANKFORT, KENTUCKY 40601-1190  
www.kentucky.gov

LAJUANA S. WILCHER  
SECRETARY

September 16, 2005



Mr. Harry McElrath  
North American Refractories Company  
Post Office Box 457  
South Shores, Kentucky 41175-0457

Re: KPDES No.: KY0000311  
North American Refractories Company  
Greenup County, Kentucky

Dear Mr. McElrath:

Our records indicate that your Kentucky Pollutant Discharge Elimination System (KPDES) permit is due to expire on April 30, 2006. According to KPDES Regulation 401 KAR 5:060, "any person with a currently effective permit shall submit a new application at least 180 days before the expiration of the existing permit..." **The due date for your permit renewal application is October 31, 2005.**

Please complete the enclosed application forms and return to the KPDES Branch, Division of Water, at the above address by the indicated due date. Applications received after the due date are in violation of 401 KAR 5:060, Section 1, which could result in enforcement action being taken.

If you have any questions regarding the completion of these forms, please contact me at (502) 564-2225, extension 465.

Sincerely,

**Courtney Seitz, Supervisor**  
Inventory and Data Management Section  
KPDES Branch  
Division of Water

CS:TJB:tjb  
Enclosures  
c: Morehead Regional Office  
Division of Water Files



**A**P Green  
**N**ARCO  
**H**arbison-Walker

**ANH Refractories Company**

RECEIVED BY KPDES BR Cherrington Corporate Center  
2005 OCT 31 P 2: 58 400 Fairway Drive  
Moon Township, PA 15108

October 27, 2005

Department for Environmental Protection  
Division of Water  
KPDES Branch  
Frankfort Office Park  
14 Reilly Road  
Frankfort, KY 40601

Subject: North American Refractories Co.  
South Shore Plant, South Shore, KY  
KPDES #KY0000311

Dear Sirs:

Please find attached two duly signed copies of the application requesting renewal of the water discharge permit which expires April 30, 2006. This submittal includes KPDES Form 1 pages 1 - 3 and KPDES Form C pages 1 - 4. These two sections cover basic information for the facility. The outfall sampling and test information is covered in Form C pages 5 - 18.

For outfall #901, past values were compiled and reported on forms where appropriate. Additional testing has been requested for some total metals but the results are not available at this time. These values should be available shortly and this section will be updated.

For outfall #902, as above, past values were also compiled and reported. This outfall is a storm water outfall and additional analysis has been requested. These analysis include some total metals and listed Part A pollutants. When these results are available, the forms will be updated.

Included is check #206481 dated October 27, 2005 in the amount of \$420.00 which covers the application fee for renewal of the KPDES permit for the North American Refractories South Shore facility. Please reference permit #KY0000311.

If you have any questions, you can contact me at 412-375-6632.

Sincerely,

  
Eric Hansberger